

AD 726139

REPORT-71-1777

28 MAY 1971

# BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS

No. 3

JANUARY - MARCH, 1971

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Security Classification

## DOCUMENT CONTROL DATA - R &amp; D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) Informatics Tisco, Inc. 6811 Kenilworth Avenue Riverdale, Maryland 20840		2a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED	
		2b. GROUP	
3. REPORT TITLE  BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS (No. 3)			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Scientific Interim			
5. AUTHOR(S) (First name, middle initial, last name)  Lida L. Allen Stuart G. Hibben			
6. REPORT DATE March 1971		7a. TOTAL NO. OF PAGES 48	7b. NO. OF REFS
8a. CONTRACT OR GRANT NO. F44620-70-C-0081		9a. ORIGINATOR'S REPORT NUMBER(S)	
b. PROJECT NO.			
c. 62701D		9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
d.		AFOSR-TR-71-1777	
10. DISTRIBUTION STATEMENT Approved for public release Distribution unlimited.			
11. SUPPLEMENTARY NOTES TECH OTHER		12. SPONSORING MILITARY ACTIVITY Air Force Office of Scientific Research 1400 Wilson Boulevard (NPG) Arlington, Virginia 22209	
13. ABSTRACT Of all material reviewed, the major yield has been from the approximately 300 periodicals which are known to report the most advanced and interesting findings in Soviet laser technology.  The period covered is the first quarter of 1971, and includes all laser-related articles received by us in that interval. The structure and selection criteria are the same as used in the first report.  Somewhat broadened selection criteria have been used for items pertinent to chemical lasers, in view of the expanding possibilities in this technology. Our literature search also reveals an increased emphasis on holographic studies, as well as on uses of stimulated Raman scattering effects in spectroscopy. Other items worthy of mention are two articles on ultraviolet lasers and one on use of an argon ion laser for under water tv transmission.			

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## **NOTE:**

The attached is published as Report Number 3 in the Soviet laser bibliography series, although it is being released prior to Number 2. The latter will contain a substantially larger volume of entries, covering the periodic literature for the last half of 1970, as well as all non-periodic literature (monographs, collections, conference reports, etc.) for the entire 1969-1970 interval. It will be issued shortly.

Stuart G. Hibben  
Project Scientist

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LASER DEVELOPMENTS

No. 3, January - March 1971

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ARPA Order No. 1622

April 28, 1971

This research was supported by the Advanced Research Projects Agency of the Department of Defense and was monitored by the Air Force Office of Scientific Research under Contract Number F44620-C-0081. The publication of this report does not constitute approval by any government organization or Informatics Tisco, Inc. of the inferences, findings, and conclusions contained herein. It is published solely for the exchange and stimulation of ideas.

ARPA Order No.: 1622  
Program Code No.: OF10  
Name of Contractor:  
Informatics Tisco, Inc.  
Effective Date of Contract:  
July 1, 1970  
Contract Expiration Date:  
December 31, 1971  
Amount of Contract: \$215,000

Contract No.: F44620-70-C-0081  
Principal Investigator:  
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## Introduction

This bibliography has been compiled by the staff of Informatics Tisco, Inc. in response to a continuing contractual assignment to monitor current Soviet-bloc developments in the quantum electronics field. Of all material reviewed, the major yield has been from the approximately 30 periodicals which are known to report the most advanced and interesting findings in Soviet laser technology.

The period covered is the first quarter of 1971, and includes all laser-related articles received by us in that interval. The structure and selection criteria are the same as used in the first report.

Somewhat broadened selection criteria have been used for items pertinent to chemical lasers, in view of the expanding possibilities in this technology. Our literature search also reveals an increased emphasis on holographic studies, as well as on uses of stimulated Raman scattering effects in spectroscopy. Other items worthy of mention are two articles on ultraviolet lasers and one on use of an argon ion laser for underwater tv transmission.

An author index is included. All cited sources are available at Informatics Tisco, Inc.

# SOVIET LASER BIBLIOGRAPHY, JANUARY-MARCH 1971

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## I. BASIC RESEARCH

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### III. SOURCE ABBREVIATIONS

DAN ArmSSR	-	Akademiya nauk Armyanskoy SSR. Doklady
DAN BSSR	-	Akademiya nauk Belorusskoy SSR. Doklady
DAN SSSR	-	Akademiya nauk SSSR. Doklady
FAiO	-	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana
FiKhOM	-	Fizika i khimiya obrabotki materialov
FTP	-	Fizika i tekhnika poluprovodnikov
FTT	-	Fizika tverdogo tela
I-FZh	-	Inzhenerno-fizicheskiy zhurnal
IT	-	Izmeritel'naya tekhnika
IVUZ Fiz	-	Izvestiya vysshikh uchebnykh zavedeniy. Fizika
IVUZ Radioelektr	-	Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika
IVUZ Radiofiz	-	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika

KhVE	-	Khimiya vysokikh energiy
KiK	-	Kinetika i kataliz
MiTOM	-	Metallovedeniye i termicheskaya obrabotka materialov
OiS	-	Optika i spektroskopiya
OMP	-	Optiko-mekhanicheskaya promyshlennost'
PMTF	-	Zhurnal prikladnoy mekhaniki i teoreticheskoy fiziki
PTE	-	Pribory i tekhnika eksperimenta
RiE	-	Radiotekhnika i elektronika
TKiT	-	Tekhnika kino i televideniya
TVT	-	Teplofizika vysokikh temperatur
UFN	-	Uspekhi fizicheskikh nauk
UFZh	-	Ukrainskiy fizicheskiy zhurnal
ZhETF	-	Zhurnal eksperimental'noy i teoreticheskoy fiziki



ZhETF. PvR

- Zhurnal eksperimental'noy i  
teoreticheskoy fiziki. Pis'ma v  
redaktsiyu

ZhPK

- Zhurnal prikladnoy khimii

ZhPS

- Zhurnal prikladnoy spektroskopii

ZhTF

- Zhurnal tekhnicheskoy fiziki

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